## Settlement

## Resource Description

A large percentage of the study area is suitable for settlement. Past state and federal land disposals have placed most of the land around the larger lakes in the study area in private hands. Cabins have been built on some of these parcels, at Flathorn, Redshirt, Cow, Delyndia and Hock Lakes.

Much of the remaining land that is suitable for settlement in the Fish Creek unit consists of Class II and III soils which are also suitable for agriculture. The priority for these lands was determined to be agriculture by the Willow Sub-Basin Plan. Therefore, this discussion of settlement land focuses on the lands on Moraine Ridge.

The Moraine Ridge subunit is on the eastern edge of the study area. It is situated south of the Nancy Lake State Recreation Area, north of the Susitna Flats State Game Refuge, and west of the Little Susitna River corridor. The boundaries of this unit have been redrawn to exclude most Class II and III soils thereby conforming to the boundaries of the proposed agricultural tracts.

The land uses recommended for this unit in the Willow Sub-basin Plan are settlement, forestry (both commercial and personal use), fish and wildlife and recreation.

The borough owns most of this unit. The state owns a little over a section south of Delyndia and Butterfly Lakes and a few other parcels. The remainder, approximately 2500 acres, is privately owned, including about 600 acres owned by Cook Inlet Regional Corporation.

Elevations range from 150 to 430 feet above sea level. Five major lakes lie either partially or entirely within the unit. Vegetation along the ridge itself is in a climax condition common to well-drained uplands found in southcentral Alaska, which includes mature stands of birch, aspen, and spruce. The understory consists of second growth birch and spruce with patches of devil's club and native grasses. Vegetation along the toe slopes and in the northern portion of the unit includes black spruce interspersed with muskeg.

Soil and slope characteristics separate the Moraine Ridge area into three topographic areas: 1) the toe slopes along the western edge, 2) the northern portion, and 3) the ridge itself. (See the general soil classification and slope maps.) The toe slopes consist almost entirely of Class II and III soils and form a transition zone between the ridge to the east and the wetlands to the west. Much of this area has been included in agricultural tracts and the Fish Creek Unit. The northern portion consists of islands of Class II-VI soils isolated by wetlands. The ridge consists of well-drained upland soils with a gravelly sub-base.

At present, summer overland vehicular access from the east is not possible because there is no bridge across the Little Susitna River. Following winter freeze up, overland access is possible by snowmachine from the south via three routes: 1) an existing tractor trail extending five miles from the Little Susitna River, 2) from the east via a cleared township line extending from the Big Lake Road approximately four miles to Moraine Ridge, or 3) from the north seven miles from the Long Lake Road. Air access is provided by four lakes in the north and by Hock Lake, located in the center of Moraine Ridge.

## Resource Evaluation

Soil capabilities. Soil types and slopes are discontinuous. Patches of Class II and III soils are too small and discontinuous to make most of this area feasible for agriculture, while a good portion are so steep that development of these soils for agricultural purposes could result in erosion.

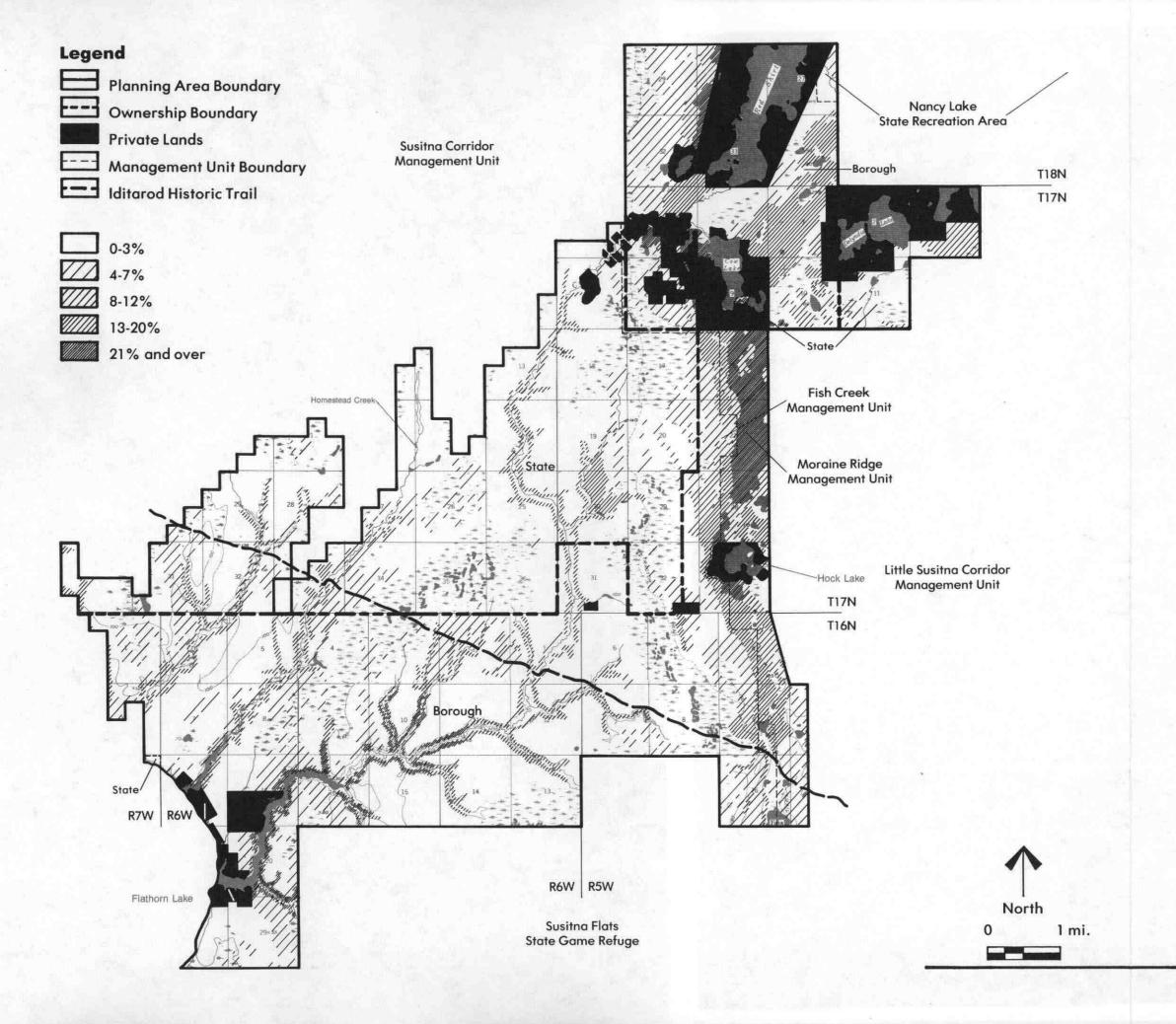
Water. Subsurface water potential for the Moraine Ridge Unit is not known.

Vegetation. On the well-drained upland patches, potential exists for management of the timber resources for selective cutting. Exact timber volumes are not known; on-site analysis, however, has shown that existing stands of timber are too small to warrant a large-scale commercial timber sale. Due to the maturity of the timber stands, available food supply for moose and bear is minimal, and the timber serves mainly as escape cover for these species. With appropriate forest management practices, this unit could serve as a supply for small-scale house log, saw log and personal use firewood demands, while increasing moose and bear feed.

Topography. The discontinuous slopes and exposure of Moraine Ridge are generally unsuited for agriculture except along the western toe slopes, where a combination of gentle slopes, good exposure, and large blocks of Class II and III soils make commercial agriculture feasible. (These lands have been included in the agricultural tracts and the Fish Creek unit.)

Settlement. Moraine Ridge contains a high potential for residential and related development. Varied topography would provide for natural visual and sound buffering, in addition to providing excellent views of Big Lake to the east, Flathorn Lake, the Susitna River and Mount Susitna to the west, and Denali (Mount McKinley) to the north.

Geographic location. The nearest existing population centers are Big Lake (seven miles east), Willow (12 miles to the north), and Point MacKenzie (eight miles to the south).



## FISH CREEK Management Plan

Slope

Proposed transportation routes. The Department of Transportation and Public Facilities has identified two major regional road corridors that traverse the project area: 1) the Chuitna River - Goose Bay corridor, (ADL 57588), which extends west across the Big Susitna River to Tyonek, and 2) a corridor extending from the existing Point MacKenzie Road north to the Parks Highway at Willow. These two corridors intersect at the southern end of the Moraine Ridge unit. A route for a future railroad extension to Point MacKenzie has been suggested through the unit, but whether and where it will be built are highly speculative at present.

Farm service/commercial center. Development of the area's agricultural potential is expected to eventually generate a need for development of a farm service center within the unit. Such a center could provide feed, seed, fertilizer, farm machinery, freezer plants, and other farm needs, as well as commercial support facilities for the potential settlement areas located along the ridge. In addition, there may eventually be a demand for storage, processing, and shipping facilities for agricultural products.